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# CONTRACT CERTIFICATE

(For Other Works)

Date:

Sub-Division AEE

Final & Part Bill

Division EE (Yelahanka Projects)

Bill Received No.....Dated.....Cash Book Voucher No.....dated.....

Schedule Docket No.

Name of Work (as per sanctioned estimate): **Drilling of Borewells and Providing RO Plants at Dwarakanagara, Palanahalli, Thirumenahalli and Sriramppura in Ward No:05.**

Reference to Agreement No. Dated: 20.2.2018

Work order No. EE/Project/YNK Zone/WO/123/17-18. Dated: 20.2.2018

Job Code OC5-17.000068. Budget head P: 3119. Est. cost: 1.35 — lakhs

Name of Contractor and Full Address: Sri GopiReddy Bangalore

Certified that the measurements were taken by me on 01/05/18 and recorded of Pages: 82132 to 82178 of measurement Book No: 17/2017-18 and that the work is satisfactorily executed.

Certified 822

Officer-in-charge of work

Certified that the measurements were verified by me on and found correct.

The work is satisfactorily executed.

Certified that the quantities of materials shown in column 3 of Account II have been actually brought to site of the work and the contractor has not previously received any advance on this security. These materials are of an expendable nature and are all required for immediate use on the work in connection with items for finished work have been agreed upon. A normal agreement signed and executed by the contractor is recorded in the office.

Sub-Division Officer

Executive Engineer
Project Division
Yelahanka Zone
Bangalore

| If Memorandum of Payment | | |
|---|---|---|
| 1) Total value of work done or supplies made as per account with in | | |
| 2) Deduct amount to be held in reserve being.....percent Rs..... | | |
| 3) " Balance | | |
| 4) Deduct Payments : | | |
| a) Amount of previous payment as in the Office cash Book Voucher No.....Dated.....S.D. No..... | Total Rs | 1.33.78.697-00 |
| Amount adjusted towards cash advance recovery of | IT | 133787-00 |
| b) Payments cost store or other materials supplied. | Cess | 133787-00 |
| Now made recovery of amount creditable to this/other work | CBE | 133799-00 |
| Amount paid on this bill Cheque/Cash | LC | 119070-00 |
| 5) Balance being unpaid value of work done held in reserve | | |
| 6) Deduct cash advance made on the Office Cash Book Voucher No.....dated.....less adjustments | Adv. | 4,00,023-00 |
| 7) Net amount due to or from contractor | Cheque | 1.29.78.674-00 |
| Unadjusted items | | |
| 8) Advance to contractor for materials brought to site (as detailed) within | | |

Gopireddy
Contractor's Signature

Received Rs..... (In words)

.....

By Cash and by adjustment of Payment as per memorandum

Witnesses:

(For use in the Office)

1.

2.

Dated.....Signature of Contractor Gopireddy

Audited & Admitted for Rs.....

Stamp Rs: 13378697-00

Rs: 129.78.674-00 by Cheque

Paid by me by cheque No.....Dated..... and Rs. 4.00.023-00 w Adjustment

Cash Rs.....Dated.....

17/9

Accts. Supdt.
Project Division
B.B.M.P.

17/09

Executive Engineer
Project Division
B.B.M.P

17/9

Initials of Officer making payment

| Sl No | Description of Work | Unit | As per Modified Shedule Qty | Previous Measurement | | Present Measurement | | | Up to date | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Qty | Amount | Qty | Rate | Amount | Qty | Amount |
| 1 | Earthwork excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in hard soil not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, stacking the excavated,soil clear from edges of excavation with lead upto 50 m. after breaking of clods complete as per specifications and as per the direction of engineer in charge of work | cum | 74.81 | - | - | 74.81 | 325.00 | 24314.06 | 74.81 | 24314.06 |
| | | | 94.40 | - | - | 75.56 | 325.00 | 24556.19 | 75.56 | 24556.19 |
| | Above 125% | | | | | | | | | |
| 2 | Providing and laying in position plain cement concrete of mix 1:4:8 with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregtes @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specificationsand as per the direction of engineer in charge of work | cum | 18.56 | - | - | 18.56 | 6000.0 | 111360<br>~~111375.00~~ | 18.56 | 111360<br>~~111375.00~~ |
| | | | 14.16 | - | - | 10.50 | 5886.07 | 61804<br>~~61830.24~~ | 10.50 | 61804<br>~~61830.24~~ |
| | Above 125% | | | | | | | | | |
| 3 | Providing and constructing granite / trap / basalt size stone masonry in foundation cement mortar 1:6, stone hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications and as per the direction of engineer in charge of work | cum | 38.48 | - | - | 38.48 | 5000.00 | 192400<br>~~192375.00~~ | 38.48 | 192400<br>~~192375.00~~ |
| | | | 34.92 | - | - | 26.76 | 5000.00 | 133800<br>~~133785.00~~ | 26.76 | 133800<br>~~133785.00~~ |
| | Above 125% | | | | | | | | | |
| 4 | Providing and constructing granite / trap / basalt size stone masonry in basement with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications and as per the direction of engineer in charge of work | Cum | 14.29 | - | - | 14.29 | 6000.00 | 85740<br>~~85725.00~~ | 14.29 | 85740<br>~~85725.00~~ |
| | | | 15.23 | - | - | 12.17 | 6000.00 | 73020<br>~~73047.00~~ | 12.17 | 73020<br>~~73047.00~~ |
| | Above 125% | | | | | | | | | |
| 5 | Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates :@0.69 cum and fine aggregtes @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation,plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications and as per the direction of engineer in charge of work | cum | 4.73 | - | - | 4.73 | 6500.0 | 30745<br>~~30712.50~~ | 4.73 | 30745<br>~~30712.50~~ |
| | | | 10.07 | - | - | 8.50 | 6500.00 | 55250<br>~~55231.31~~ | 8.50 | 55250<br>~~55231.31~~ |
| | Above 125% | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|
| 6 | Providing and laying in position reinforced cement concrete of design mix M30 with OPC cement @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @0.80cum and fine aggregates @ 0.40cum, with superplastisizer @ 3lts confirming to IS9103 1999 Reaffirmed 2004, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundationfor footing ,pedestals ,retaining walls ,retern walls , walls ( any thickness ) including attached plasters, columns, pillars, posts, struts, buttresses, bed blocks, anchor blocks, and plinth etc., including cost of all materials, labour, HOM of machinery, curing, complete as per specifications and as per the direction of engineer in charge of work | cum | 5.51 | - | - | 5.51 | 7000.0 | 28750 - 22820 - | 5.51 | 22820 - |
| | | | 4.33 | - | - | 3.26 | 7000.00 | 22837.50 | 3.26 | 22837.50 |
| | Above 125% | | | | | | | | | |
| 7 | Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications and as per the direction of engineer in charge of work | MT | 0.34 | - | - | 0.34 | 70000.0 | 23800 - 23625.00 16800 - | 0.34 | 23800 - 23625.00 16800 - |
| | | | 0.30 | - | - | 0.24 | 70000.00 | 16732.10 | 0.24 | 16732.10 |
| | Above 125% | | | | | | | | | |
| 8 | Providing and constructing load bearing wall with solid concrete blocks of size 400x150x200 mm having block density not lessthan 1800 kg/m3 and having a minimum average compressive strength 5.00 N/mm2 confirming to IS 2185 (Part) : 2005 and constructed with CM 1:4 , as per IS 2572:2005 including cost of all materials, labour charegs, scaffolding, curing complete as per specifications and as per the direction of engineer in charge of work | sqm | 327.60 | - | - | 327.60 | 1200.0 | 393120.00 87495 - | 327.60 | 393120.00 87495 - |
| | | | 143.44 | - | - | 87.06 | 1005.00 | 87490.11 | 87.06 | 87490.11 |
| | Above 125% | | | | | | | | | |
| 9 | KSRB15-3.10 : Providing 20mm thick cement plaster in single coat with cement mortar 1:3, to stone masonry & concrete surface including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications.cement mortor 1:6 and as per the direction of engineer in charge of work | sqm | 694.01 | - | - | 694.01 | 250.0 | 173503.13 | 694.01 | 173503.13 |
| | | | 237.77 | - | - | 124.17 | 250.0 | 31043.12 | 124.17 | 31043.12 |
| | Above 125% | | | | | | | | | |
| 10 | 50mm dia M.S.Hallow pipes B class 14 gauge P.NO.X.SL.NO 286 and as per the direction of engineer in charge- | kgs | 108.93 | - | - | 96.82 | 75.0 | 7261.80 | 96.82 | 7261.80 |

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| 11 | PROVIDING TRAPEZOIDAL PROFILED SHEET Providing and installing of pre painted Galvolume iron Trapezoidal profiled sheet of approved make 1060 mm width (1000 mm cover width), 28-30 mm crest height with crest distance of 200 mm c/c with 2 ribs at the centre for stiffening. The total coated thickness (TCT) of the sheet will be 0.47 mm +/- 0.02 mm tolerance Zinc-Alu Alloy coating AZ150 gsm as per ASTM 1397/A755-550 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 20-22 microns using self drilling/self tapping screws of 25 mm length, to be fixed over the existing purlins, rafters, channels and trusses and as per the direction of engineer in charge of work | sqm | 158.63 | - | - | 156.15 | 1200.0 | 187380.00 | 156.15 | 187380.00 |
| | Above 125% | | 17.13 | - | - | 0.00 | 1191.24 | 0.00 | 0.00 | 0.00 |
| 12 | Mineral Fiber false ceiling Providing and laying of world class mineral acoustic ceiling panels of as per the following specification:- Tile of approved make Mineral Acoustic ceiling panels of size 595x595mm-12mm thick suitable for use in arrears up to 40 C and RH 70UR as per manufacturer. Tile have 15 min fire retardant and does not contain asbestos/urea formaldehyde, Technical details of New Modena are- Thermal conductivity Non-disposable, Light Reflection 80% fire resistance Non-resistance Non-disposable. Mineral fiber ceiling panels are placed inside the grid work and as per the direction of engineer in charge of work | sqm | 0.00 | - | - | 0.00 | 2500.0 | 0.00 | 0.00 | 0.00 |
| 13 | Providing, fabricating, assembling and fixing in position aluminium doors using following aluminium mat finish or glossy finish, outer frame plain section 101.6x44.45mm thickness 3.18mm, section weight 2.404 kg/m, door shutters vertical section 44.62x44.45mm thickness 3.18mm, section weight 1.505kg/m, top section 47.62x44.45mm thickness 3.00mm, section weight 1.426kg/m bottom section 114.3x44.45 thickness 3.18mm, section weight 2.646kg/m, door central section 49.91x44.45mm thickness 3.00mm, section weight 1.495 kg/m glazing clips 19x17.3x11mm thickness 0.9mm section weight 0.124kg/m; aluminium sections cut to length joint metred cornersgrinded, the shutters pivoted opening arrangement with heavy duty aluminium alloy automatic door closures floor mounted, providing and fixing standard approved accessories, such as aluminium handle for full width or length, tower bolts, lock, pivots: P.V.C. or rubber gasket with 5.5m. thick plain glass for top and bottom panel; aluminium sections treated for removal of any rust and prevention of further rust formation, and coated with greasy materials for non-adherance of mortars or any other sticky materials; the assembled frame fitted with the corner angles, strips and fitted with screws, rawl plugs or teakwood gutties to R.C.C. columns or masonry on sides. beams and | sqm | 66.36 | - | - | 59.08 | 7010.0 | 414150.80<br>154800 | 59.08 | 414150.80<br>154800 |
| 14 | Providing flooring with 60 cms.x 60 cms. size Vitrified glazed tiles of approved quality & make, fixed on top of existing flooring fixed with suitable adhesive, including cutting the tiles to the required size and fixing etc., completeand as per the direction of engineer in charge of work | Sqm | 138.84 | - | - | 123.84 | 1250.0 | 154793.75 | 123.84 | 154793.75 |

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| 15 | Providing and fixing pull and push type rolling shutters of approved make out of 18 guage, 75mm wide cold rolled steel laths of convex corrugation, with side guides and bottom rail, with interlocking arrangements for steel laths by means of alternate clips, suspension shaft with High tension coil type springs two numbers, mounted on specially designed pipe shaft, with bracket plates, guide channels, ball bearing arrangements, for inside & outside locking with push & pull operations complete including pulling hooks, 4Nos. handles with all fittings and accessories, painted with a coat of red lead paint (without top cover) cost of materials, labour, HOM of machinery complete as per specifications. Shutter size 3mx2.8 m and as per the direction of engineer in charge of work | sqm | 45.36 | - | - | 40.32 | 3500.0 | 141120.00 | 40.32 | 141120.00 |
| 16 | Providing and laying flooring using prepolished, water cut/ gang saw 19mm thick granite laid over bed of 20mm thick CM 1:4 and jointed with neat cement slurry mixed with pigments to match shade of granite slabs including laying of POP on finished surface and claning the surface including cost of all meterials and labour etc, complete as per specifications using solver grey granite/multy red/ruby red/black/Hassan green granite of width not less than 1200mm and as per the direction of engineer in charge of work | sqm | 17.77 | - | - | 15.48 | 3000.0 | 46440~ ~~46434.00~~ | 15.48 | 46440~ ~~46434.00~~ |
| 17 | Providing and finishing external walls in two coats with waterproof cement paint of approved brand and shade to give an even shade after throughly brooming the surface to remove all dirt and loose powdered material, free from mortar drops and other foreign matter cost of materials, labour, complete as per specifications, with primer and as per the direction of engineer in charge of work | sqm | 694.01 | - | - | 694.01 | 100.0 | 69401.25 | 694.01 | 69401.25 |
| | Above 125% | | 237.77 | - | - | 124.17 | 95.54 | 11863.61 | 124.17 | 11863.61 |
| 18 | Providing and applying enamel metal paint two coats ( excluding priming coat ) over new steel or other metal surface brushing to give an even shade after cleaning oil, grease, dirt and other foreign matter, including cost of materials, labour, complete as per specifications and as per the direction of engineer in charge of | sqm | 113.40 | - | - | 100.80 | 100.0 | 10080.00 | 100.80 | 10080.00 |
| 19 | Conveying the excavated earth by private vehicle up to 15KMS including lead and lift loading unloading etc., complete. and as per the direction of engineer in charge | cum | 59.85 | - | - | 59.85 | 125.00 | 7481.25 | 59.85 | 7481.25 |
| | Above 125% | | 109.36 | - | - | 90.52 | 125.00 | 11315.00 | 90.52 | 11315.00 |
| 20 | Supplying water storage tanks made of virgin polymer (LLDPE) with two layers outer Black or Blue and inner White layer of approved quality and make, conforming to I.S.I./ISO/SSI specifications and as per the direction of engineer in charge of work | ltr | 18000.00 | - | - | 16000.00 | 10.0 | 160000.00 | 16000.00 | 160000.00 |
| 21 | Providing and fixing Chorinated Poly Venyl Chloride (CPVC) pipes conforming to IS 15778, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamp at 1.00 mtr spacing. This includes jointing of pipes and fittings with one step CPVC solvent cement & the cost of cutting chases & making good the same including testing of joints complete. (Concealed work including cutting chases and good the walls etc.)25MM DIA and as per the direction of engineer in charge of work | m | 324.00 | - | - | 288.00 | 280.0 | 80640.00 | 288.00 | 80640.00 |

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|---|---|---|---|---|---|---|---|---|---|---|
| 23 | Providing and fixing in position brass gate valve with C I wheel of approved quality ( screwed end ) 25mm nominal bore including cost of all materials, labour and TOM of equipments with all leads complete as per specifications and as per the direction of engineer in charge of work | each | 27.00 | | | 24.00 | 470.0 | 10080.00 | 24.00 | 10080.00 |
| 24 | SKID SS 202, PUMP CRI1HP, VESSEL 1354 PENTAIR, PRESSURE GAZE 10KGS NORMAL, MPV 1"NB FRONT FACE FILTER, HOUSING 20"JUMBO-1", SPUN 20 JUMBO, PUMP CRI 2 -180-3, PT-8040 FRP PANTHER, MEMBRANE DOW 8040, CONTROLL PANNEL 1X3 (SUPER), ROTAMETER 120-1680 ACRYLIC, ROTAMETER 400-2000 ACRYLIC, PRESSURE GAZE GLYSERINE - 21KG PANTHER, BRINE CON VALVE 3/4, ACRYLIC SHEET, LPS DENFOS, HPS DENFOS, DOSINGPUMP DOSE, SAND, CHEEPS, ACTIVATED CARBON INDUSTRIAL, ANTI DOSING CHEMICAL, HANDLE VALVE, ASSEMBLING AND COMMISSIONING, TANK SS304 1000LTR and as per the | nos | 9.00 | - | - | 8.00 | 555000.0 | 4440000.00 | 8.00 | 4440000.00 |
| 24 | Open conduit System: Supplying heavy gauge PVC conduit pipe .....dia confirming to IS 2509 with suitable size bends, plugs in case of RCC ceiling and RCC wall stone structure or rawl plugs in case of brick walls and cement plastering damaged portion using heavy gauge saddles at an interval of 700mm using WF screws.a) 19/25 mm dia 2mm thick and as per the direction of engineer in charge of work | m | 375.00 | - | - | 337.00 | 65.00 | 21905.00 | 337.00 | 21905.00 |
| 25 | Supplying and flush mounting teak wooden box without front plank, made of not less than 15mm thick wood, after due groove cutting, necessary masonry patch work complete. d)8''x6''x3''(203x152x76mm) and as per the direction of engineer in charge of work | each | 27.00 | - | - | 24.00 | 85.00 | 2040.00 | 24.00 | 2040.00 |
| 26 | Point wiring using copper wire with switch Supplying and wiring adopting loop system in existing PVC Conduit/casing caping using Copper PVC insulated multi strand 2x1.5Sqmm copper wire with a 6Amps flush type SP control switch shall be fixied on the exisiting plastic sheet /gang box, the pther end of the wires shall be terminated with sufficient loose length in a wood/PVC round block.complete for each outlet. I. Point wiring using class A materials a) Short point upto 3Mtr from tapping point to out let via switch and as per the direction of engineer in charge of work | each | 9.00 | - | - | 8.00 | 200.00 | 1600.00 | 8.00 | 1600.00 |
| 27 | b) Medium point above 3Mtr upto 6Mtr from tapping pointr to out let and as per the direction of engineer in charge of work | each | 9.00 | - | - | 8.00 | 300.00 | 2400.00 | 8.00 | 2400.00 |
| 28 | c)Long point above 6Mtr upto 10Mtr from tapping point to out let and as per the direction of engineer in charge of work | each | 36.00 | - | - | 32.00 | 400.00 | 12800.00 | 32.00 | 12800.00 |
| 29 | Supplying 6A flush/projected type socket and a 6 amps flush/ projected type SP switch either surface/flush mounting in a exisiting gang box or in a 4mm thick plastic sheet and fixing over a flush mounted wooden box and wiring using necessary capacity wires as required. b) 6Amps 3/5 way and as per the direction of engineer in charge of work | each | 9.00 | - | - | 8.00 | 150.00 | 1200.00 | 8.00 | 1200.00 |

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|---|---|---|---|---|---|---|---|---|---|---|
| 30 | Wiring for lighting/power circuit using one of FRNS PVC insulated 1100v grade, multis and CopperWIRE FLOW conductor single core cable in open or concealed system of wiring.I Group A Materials.a) 1.5 sqmm and as per the direction of engineer in charge of work | m | 720.00 | | | 640.00 | 18.00 | 11880.00 | 640.00 | 11520.00 |
| 31 | b)2.5Sqmm and as per the direction of engineer in charge of work | m | 270.00 | - | - | 240.00 | 25.00 | 6000.00 | 240.00 | 6000.00 |
| 32 | c)4 sqmm and as per the direction of engineer in charge of work | m | 1440.00 | - | - | 1280.00 | 35.00 | 44800.00 | 1280.00 | 44800.00 |
| 33 | Supplying and fixing phylum brand hand plastic sheet 4mm thick with necessary niches for fixing switches, regulators etc., and fixing on exisiting wood or metal box using N.F.screw and as per the direction of engineer in charge of work | sqm | 13500.00 | - | - | 12000.00 | 0.35 | 4200.00 | 12000.00 | 4200.00 |
| 34 | Supplying and fixing pbbc bakelight stright or slant batton holderand wiring within 60v/230volts lamp group A and as per the direction of engineer in charge of work | each | 36.00 | - | - | 32.00 | 100.00 | 3200.00 | 32.00 | 3200.00 |
| 35 | Supply patti type tube light fittings of 4'-28 watts fluorescent tube fittings made out of Ms sheet ans stove enameled with low loss open construction copper wound ferromagnetic ballast starter ,locking type brass contact holders mounted on double fold type sheet base fully wired for use on 230 volts AC supply including t5 lamp and as per the direction of engineer in charge of work | each | 18.00 | - | - | 16.00 | 720.00 | 11520.00 | 16.00 | 11520.00 |
| 36 | Supply wall mountaing fan suitable to operate of single phase -230v A.C supply 400mm sweep a and as per the direction of engineer in charge of work | each | 9.00 | - | - | 8.00 | 2800.00 | 22400.00 | 8.00 | 22400.00 |
| 37 | Supplying decorative horizontal type street light fluorocent fitting weather and water proof complete complete with energy saving electronoc ballast etc., locking type brass contact holders with one number of 4ft 40watt flourcent tube completely wired for use on 230/250volts 50cycles AC supply with opel reeded parspex cover of bottom complete fitting 1x4'-28watts and as per the direction of engineer in charge of work | each | 9.00 | - | - | 8.00 | 2000.00 | 16000.00 | 8.00 | 16000.00 |
| 38 | FSUPPLING OF 2 PIN/4PIN 18W CFL LAMP and as per the direction of engineer in charge of work | each | 18.00 | - | - | 16.00 | 150.00 | 2400.00 | 16.00 | 2400.00 |
| 39 | Supply and fixing polished wood board made of not less than 15mm thick plank on both sides with plank made out of not more than 2 pices and fixing the same to the wall using tapered inverted woode plug screws etc., a) 20"x20"2.5" chapter and as per the direction of engineer in charge of work | each | 18.00 | - | - | 16.00 | 350.00 | 5600.00 | 16.00 | 5600.00 |
| 40 | Supplying and fixing of Procelain fuse channel with cut out on exisiting wooden/panel using necessary nuts, bolts and washers etc., complete.a) 32Amps and as per the direction of engineer in charge of work | each | 54.00 | - | - | 48.00 | 200.00 | 9600.00 | 48.00 | 9600.00 |
| 41 | Supply of an load charge over switches 4poles 415v 50Hz A.C supply with AC23A duty a) up to 63amps Groups A and as per the direction of engineer in charge of work | each | 9.00 | - | - | 8.00 | 5000.00 | 40000.00 | 8.00 | 40000.00 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 43 | Supplying and fixing miniature circuit breakers on existing SPN distribution boards using necessary fixing materials and C type curve indicator ON/OFF energy cross 4 with short circuit breaking capacity of 10K and complete wiring as required and as per the direction of engineer in charge of work | each | 0.00 | - | - | 8.00 | 2000.00 | 16000.00 | 8.00 | 16000.00 |
| 44 | Supplying fixing and wiring Electronic 10 to 40 amps Three phase 4wire class -1 Accuracy energy meter Group A and as per the direction of engineer in charge of work | each | 27.00 | - | - | 24.00 | 1800.00 | 43200.00 | 24.00 | 43200.00 |
| 45 | Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipments on the meter board using 40mm dia 2.90 thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proprotion of salt and charcoal 150mm alround the pipe to complete depth. the connection form the pipe to the conduit etc, is to be established through GI wire of size as oer ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and checknuts etc, the pipe shall have 16 through holes of 12mm dia. and as per the direction of engineer in charge of work | nos | 9.00 | - | - | 8.00 | 5100.00 | 40800.00 | 8.00 | 40800.00 |
| 46 | Supplying and running of GI/Copper strips for grounding connections using necessary fixing material as required GI strip 25x3mm and as per the direction of engineer in charge of work | m | 18.00 | - | - | 16.00 | 3000.00 | 48000.00 | 16.00 | 48000.00 |
| 47 | Supplying of LT UG cable having aluminium conductor PVC insulated, sheathed, galvanished, steel wire/steel tap armoured cable with PVC outer sheating 1.1 KV class.I. Class 'A' PVC Cable.d) 4 core 16 sqmm chapter and as per the direction of engineer in charge of work | m | 135.00 | - | - | 120.00 | 100.00 | 12000.00 | 120.00 | 12000.00 |
| 48 | Labour charges for lying of 1.1 KV class UG cable when supplied agency in existing trench GI pipe / stoneware pipe / on wall /on pole as required. I. In existing trench/duct.a) 6 sqmm to 16 sqmm and as per the direction of engineer in charge of work | m | 237.00 | - | - | 202.00 | 200.00 | 40400.00 | 202.00 | 40400.00 |
| 49 | Digging of trench of 0.6 m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating and as per the direction of engineer in charge of work | m | 237.00 | - | - | 202.00 | 20.00 | 4040.00 | 202.00 | 4040.00 |
| 50 | Supplying and fixing of class A (medium duty) GI pipe of wall thick ness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV class. a) 40mm chapter and as per the direction of engineer in charge of work | m | 172.00 | - | - | 144.00 | 130.00 | 18720.00 | 144.00 | 18720.00 |
| 51 | Supplying &fixing L.T.cast iron pot heads suitable for 1.1 KV class UG cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts, nuts and washers ect.b) 16 Sqmm and as per the direction of engineer in charge of work | m | 72.00 | - | - | 64.00 | 405.00 | 25920.00 | 64.00 | 25920.00 |
| 52 | Providing BESCOM deposits excuding ESCOM 3 pahse energy meter (as per intimation letter from ESCOMS) for 10hp 3phase power supply under LT-5 tariff. and as per the direction of engineer in charge of work | each | 9.00 | - | - | 8.00 | 300.00 | 2400.00 | 8.00 | 2400.00 |
| | | L.S | 9.00 | - | - | 8.00 | 5500.00 | 44000.00 | 8.00 | 44000.00 |

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|---|---|---|---|---|---|---|---|---|---|
| 53 | Geophysical investigation of site for sinking Borewell for supplying drinking water to the habitation either through the Hand pump, MWS of P.W.S.S by vertical electrical sounding by adopting Venner or Schlumberger's method, including reconnaissance survey of geological formation, Gerophysical investigation of existing Ground Wate in the vicinity, its qualityf 1.0 meter in consolidated formation for proper seating of casing pipe, depth of drilling required to cover full depth of aquifer proposed to be tapped, probable yield and other information required including transportation of instrument and accessories to work site., engaging techinical personal and labour required etc., as per Specification and as per the direction of engineer in charge of work | each | 8.00 | - | - | 7.00 | 2000.00 | 14000.00 | 7.00 | 14000.00 |
| 54 | Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.,) and as per the direction of engineer in charge of work 0 m to 50m | m | 400.00 | - | - | 350.00 | 350.00 | 122500.00 | 350.00 | 122500.00 |
| 55 | 50m to 100m | m | 400.00 | - | - | 350.00 | 450.00 | 157500.00 | 350.00 | 157500.00 |
| 56 | 100m to 150m | m | 400.00 | - | - | 350.00 | 475.00 | 166250.00 | 350.00 | 166250.00 |
| 57 | 150m to 200m | m | 400.00 | - | - | 350.00 | 500.00 | 175000.00 | 350.00 | 175000.00 |
| 58 | 200m to 250m | m | 350.00 | - | - | 300.00 | 580.00 | 174000.00 | 300.00 | 174000.00 |
| 59 | 251m to 300m | m | 443.00 | - | - | 393.00 | 650.00 | 255450.00 | 393.00 | 255450.00 |
| 60 | Supply of ISI mark 175 mm nominal bore medium black ERW casing pipe of 5 mm thick black electric resistance continuous welded mild steel tube material confirming to IS 1387 / 1993 & manufactured from hot rolled steel skelp / stripes in random length of 4 to 7 mts both ends threaded confirming to IS 554 / 1985, one end fixed with a socket and the other and with a plastic protection end and as per the direction of engineer in charge of work | Rmt | 496.24 | - | - | 446.24 | 1500.00 | 669365.85 | 446.24 | 669365.85 |
| 61 | Providing 250mm dia PVC Pipe BWSSB and as per the direction of engineer in charge of work | Rmt | 135.00 | - | - | 135.00 | 1200.00 | 162000.00 | 135.00 | 162000.00 |
| | Above 125% | | 29.00 | - | - | 17.00 | 1191.47 | 20254.94 | 17.00 | 20254.94 |
| 62 | Providing 175mm dia ms casing cap and as per the direction of engineer in charge of work | nos | 7.00 | - | - | 6.00 | 120.00 | 720.00 | 6.00 | 720.00 |
| 63 | Providing MS Casing pipe collars and as per the direction of engineer in charge of work | nos | 67.50 | - | - | 64.00 | 175.00 | 11200.00 | 64.00 | 11200.00 |
| | Above 125% | | 4.50 | - | - | 0.00 | 173.01 | 0.00 | 0.00 | 0.00 |

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|---|---|---|---|---|---|---|---|---|---|---|
| 64 | Supply and delivery at site brand New texmo/ innoval/ Lubi/ Sabar / Atalanta/ Calamal/ make suitable for vertical installation in 150mm dia bore well comprising of single stage or multistage CF pump close coupled by measns of stainless steel coupling to suitable HP suitable speed totally enclosed and filled with pure drinking water (Wet type) squirrel cage submersible induction motor suitable for opertation of 3PH., 50 Hz, 380/440 volts AC supply fitted with required aqccessories such as suction, casing suction strainers sand guard Non return value etc. complete . The pump and motor shall form an integral unit with all the required fittings and as per the direction of engineer in charge of work | nos | 0.00 | - | - | 0.00 | 74000.00 | 0.00 | 0.00 | 0.00 |
| 65 | Providing and fixing to wall celling and floor glavanised/ mild steel tubes (medium grade 1.27 kg /mt ) B class 50 mm dia nominal bore with all fittings ( earth work in trenches to be measured and paid for separately ) including cost of all materials, labour charges, HOM of equipments and testing complete as per specifications and as per the direction of engineer in charge of work | m | 1931.00 | - | - | 1656.00 | 600.00 | 993600.00 | 1656.00 | 993600.00 |
| 66 | Supplying and drawing 3 core flat PVC sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper conductor confirming to table 3 class 5 of IS:8130-1984 and virgin grade PVC insulation and Powder coated extrued PVC sheathed suitable for working voltage upto 1100 Volts as per IS - 694 ; 1990 AND CONFORMING TO gtp OFGROUP A P. No. 12/ I No. (2.10.4) 3cx 6.0 Sqm and as per the direction of engineer in charge of work | m | 4100.00 | - | - | 3525.00 | 220.00 | 775500.00 | 3525.00 | 775500.00 |
| 67 | Labour charges for erection of new/ repaired submersible pumpset along with gi pipes inculding transportion each length pno 558 ino 3 bwssb and as per the direction of engineer in charge of work | nos | 314.00 | - | - | 270.00 | 100.00 | 27000.00 | 270.00 | 27000.00 |
| 68 | Supplying and flush polished wood board with out front frount plank made of not less than 15mm thick plank after due groove cutting Finishing with necessary on fixing the same to the wall using tapered inverted wooden plugs screws etc and as per the direction of engineer in charge of work | each | 7.00 | - | - | 6.00 | 325.00 | 1950.00 | 6.00 | 1950.00 |
| 69 | KV LT UG cable having aluminium condutor PVC insulated shethed, EXTREDED INNER SHEATHRD galvnised steel,stirp confirming IS 3975;1990 AND extruded PVC outer sheathing armoured cable IS 1554 part 1;1998 and confirming to GTP of group and as per the direction of engineer in charge of work | m | 148.00 | - | - | 118.00 | 165.00 | 19470.00 | 118.00 | 19470.00 |
| 70 | Labour charges for laying of 1.1 K.V class UG cable, P No. 61 / I No. 7.8.1 In existing trencg/duct 6Sqmm to 16 Sqmm) KPWD Electrical S and as per the direction of engineer in charge of work | m | 148.00 | - | - | 118.00 | 15.00 | 1770.00 | 118.00 | 1770.00 |
| 71 | Digging or trenching of 0.6m deep x 0.5 mtr wide refilling the trench to the required ground level and consolidating and as per the direction of engineer in charge of work | m | 123.00 | - | - | 98.00 | 125.00 | 12250.00 | 98.00 | 12250.00 |

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|---|---|---|---|---|---|---|---|---|---|---|
| 72 | Supplying and fixing of Class A (medium duty) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV class and as per the direction of engineer in charge of work | m | 21.00 | - | - | 18.00 | 400.00 | 7200.00 | 18.00 | 7200.00 |
| 73 | Supplying and fixing L.T. cast Iron pot head suitable for 1.1 KV class UG cable filled with necessary bituumen/insulating compound complete with terminals, clamps, bolts, nuts and washers and as per the direction of engineer in charge of work | nos | 7.00 | - | - | 6.00 | 325.00 | 1950.00 | 6.00 | 1950.00 |
| 74 | Supplying, fixing, wiring, earth electrode for grounding conduits, I.C cutouts and other equipments on the meter board using 40 mm dia 2.90 mm thick GI pipe 2.5 m long buried in a pit. The pit should be filled with equal propotion of solt and charocoal 150 mm alround the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size, as per ISI specification 7.3.3 IS 732 using 12 mm dia bolts, nuts, washers and check nuts, etc., the pipe shall have 16 throught holes of 122 mm dia and as per the direction of engineer in charge of work | nos | 7.00 | - | - | 6.00 | 2900.00 | 17400.00 | 6.00 | 17400.00 |
| 75 | Supplying and fixing of Porcelain fuse channel with cut out on existing wooden / panel using necessary nuts, bolts and washer etc., complete.... and as per the direction of engineer in charge of work | each | 21.00 | - | - | 18.00 | 400.00 | 7200.00 | 18.00 | 7200.00 |
| 76 | Supplying and fixing of heavy duty glands for ug cable 1.1 kv etc., complete and as per the direction of engineer in charge of work | each | 84.00 | - | - | 72.00 | 100.00 | 7200.00 | 72.00 | 7200.00 |
| 77 | Supplying and fixing miniature circuit breakers/solaters on existing MCB distribution boards using necessary fixing materiasl wiring complete as requireds 5 to 32 amps triple pole with all lead and lift, loading, unloading and labour charges etc complete as per specifications and as per the direction of engineer in charge of work | each | 7.00 | - | - | 6.00 | 1700.00 | 10200.00 | 6.00 | 10200.00 |
| 78 | Fabrication supplying and mounting MS box of 16 SWG suitable for floor /wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished 2 coats of red oxide primer paint and finally finished with approved colour enamelled metal paint etc., complete box of 21600 sqcm @ Rs.0.33 and as per the direction of engineer in charge of work | sqcm | 263550 | - | - | 225900.0 | 0.38 | 85842.00 | 225900.0 | 85842.00 |
| 79 | Providing and fixing in position 50mm nominal bore gun metal non-return valve horizontal type of approved make including cost of all materials, labour and HOM of equipments with all leads complete as per specifications and as per the direction of engineer in charge of work | nos | 7.00 | - | - | 6.00 | 1700.00 | 10200.00 | 6.00 | 10200.00 |
| 80 | Providing NP/CP waste unions conforming to ISI specifications and fixing them in position as per directions including cost of materials, fixtures and conveyance to work spot etc., complete and as per the direction of engineer in charge of work | nos | 14.00 | - | - | 12.00 | 300.00 | 3600.00 | 12.00 | 3600.00 |

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|---|---|---|---|---|---|---|---|---|---|---|
| 81 | Gate valve 50 mm nominal bore gun metal and as per the direction of engineer in charge of work | nos | 21.00 | - | | 18.00 | 1750.00 | 31500.00 | 18.00 | 31500.00 |
| 82 | NIPPLE 50 mm nominal bore gun metal and as per the direction of engineer in charge of work | nos | 7.00 | - | - | 6.00 | 125.00 | 750.00 | 6.00 | 750.00 |
| 83 | S BEND 50 mm nominal bore gun metal and as per the direction of engineer in charge of work | nos | 21.00 | - | - | 18.00 | 230.00 | 4140.00 | 18.00 | 4140.00 |
| 84 | TEE 50 mm nominal bore gun metal and as per the direction of engineer in charge of work | nos | 7.00 | - | - | 6.00 | 175.00 | 1050.00 | 6.00 | 1050.00 |
| 85 | Supplying and delivery at site brand new star / Essen/ Lotus/Sun-shines/Adarsh/ GK Controls best indigenous make combined energy meter - cum- control panel board unit of size 600x450 x200 mm minimum mechanically strong vermin and water proof. The unit shall have two detachable doors suitable for operation on 3 ph, 50Hz, 380/440 volts, A.C supply with spring loaded latch, locking device with a key ribs should be provided inside the door, canopy apron and louvers ventilators shall be provided. the combined energy meter cum- control panel board unit suitable for operation. The panel board shall be fabricated on single unit in the above components for suitable pumpset. PRED Bangalore Circle SE Approved Date 30.07.2010 15HP to 30 HP Star-Delta Starter and as per the direction of engineer in charge of work | nos | 7.00 | - | - | 6.00 | 12000.00 | 72000.00 | 6.00 | 72000.00 |
| 86 | Earth work excavation for foundation of buildings, culverts, water supply, sanitary lines and electrical conduits either in pits or in trenches, 1.5m and above in width, in ordinary soil, exceeding 1.5m in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with all lead upto 50m after breaking of clods complete as per specifications and as per the direction of engineer in charge of work | Cum | 1110.08 | - | - | 1053.24 | 185.00 | 194849.40 | 1053.24 | 194849.40 |
| 87 | Providing and installing at site of work pvc pipes including cost of pipes and special and labour including lowering into trenches laying true to line level and prefect linking at joints, leak proof including jointing of approved type with all labour and lift charges handling charges including encasing the pipes all round to a depth not less than 15 cms with gravel or selected earth available from the excavation etc. complete PVC pipe of 6kg/cm2 63mm (0.662) and as per the direction of engineer in charge of work | m | 1968.00 | - | - | 1868.00 | 140.00 | 261520.00 | 1868.00 | 261520.00 |
| 88 | Filling available excavated earth (excluding rock) in sides of foundations upto plinth in layers not exceeding 20 cms in depth, compacting each deposited layer by ramming after watering with a lead upto 50m and lift upto 1.5m including cost of all labour complete as per specifications and as per the direction of engineer in charge of work | cum | 1110.08 | - | - | 1053.24 | 125.00 | 131655.00 | 1053.24 | 131655.00 |
| 89 | BESCOM Deposit | Ls | 7.00 | - | - | 6.00 | 11500.00 | 69000.00 | 6.00 | 69000.00 |
| | **EIRL** | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|
| 90 | Coin Box with motor including cost of all labour complete as per specifications and as per the direction of engineer in charge of work | each | 9.00 | - | - | 8.00 | 56000.00 | 448000.00 | 8.00 | 448000.00 |
| 91 | Providing and Fixing pre cast covering Slab made out of CC 1:2:4 with 10cm thick and Finishing cutting ,including form work,curing,including cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete. | sqm | 6.08 | - | - | 6.08 | 2100.00 | 12757.50 | 6.08 | 12757.50 |
| 92 | Supply and delivery at site brand New texmo/ innoval/ Lubi/ Sabar / Atalanta/ Calamal/ make suitable for vertical installation in 150mm dia bore well comprising of single stage or multistage CF pump close coupled by measns of stainless steel coupling to suitable HP suitable speed totally enclosed and filled with pure drinking water (Wet type) squirrel cage submersible induction motor suitable for opertation of 3PH., 50 Hz, 380/440 volts AC supply fitted with required aqccessories such as suction, casing suction strainers sand guard Non return value etc. complete . The pump and motor shall form an integral unit with all the required fittings. | Nos | 1.00 | - | - | 1.00 | 50167.04 | 50167.04 | 1.00 | 50167.04 |
| 93 | Supply and delivery at site brand New texmo/ innoval/ Lubi/ Sabar / Atalanta/ Calamal/ make suitable for vertical installation in 150mm dia bore well comprising of single stage or multistage CF pump close coupled by measns of stainless steel coupling to suitable HP suitable speed totally enclosed and filled with pure drinking water (Wet type) squirrel cage submersible induction motor suitable for opertation of 3PH., 50 Hz, 380/440 volts AC supply fitted with required aqccessories such as suction, casing suction strainers sand guard Non return value etc. complete . The pump and motor shall form an integral unit with all the required fittings. | Nos | 6.00 | - | - | 5.00 | 67635.92 | 338179.60 | 5.00 | 338179.60 |
| | **Total** | | | | | | | **13378697.56** | | **13378697.56** |

**CERTIFICATE**

1 Certified that the work done is satisfactorily.

2 There is no departmental issues by BBMP

AG

Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore